

2008 EDI: Administrative Transaction Review



January 2009

EDI Overview

Electronic data interchange (EDI) was developed in the 1960's to harmonize computer systems within and across organizations. EDI allows the electronic exchange of information in a standard format, with the purpose of decreasing the use of paper.¹ EDI has since grown from supporting simple business transactions to providing a wide range of benefits for many industry sectors, including health care. The health care industry uses EDI for indirect patient care administrative transactions, which create efficiencies in the reimbursement process. The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA-AS) established health care transaction standards and code sets for non-clinical transactions.²

EDI has become an essential application in health care and serves as the foundation by which clinical transactions are developed to support the exchange of electronic health information. One of the standard administrative transactions defined by HIPAA-AS is the electronic claim, which is used by providers to submit charges to third party payers. According to a 2006 survey conducted by America's Health Insurance Plans, or AHIP, the average cost to process an electronic claim is approximately 85 cents as compared to nearly \$1.58 to process a single paper claim.³ EDI can help to decrease administrative expenses for payers and providers by allowing providers to submit claims more efficiently through a standardized, electronic format.⁴

COMAR 10.25.09, *Requirements for Payers to Designate Electronic Health Networks*, requires payers with a premium volume of approximately \$1 million or more to submit census information on their use of administrative transactions to the Maryland Health Care Commission (MHCC) annually. MHCC uses this information to develop an industry brief on the adoption of EDI among payers and providers in Maryland. The *2008 EDI: Administrative Transaction Review* assesses information from 39 private payers, which includes six large private payers (Aetna, CareFirst, CIGNA, Kaiser, MAMSI, and UnitedHealthcare), Medicare and Medicaid, and the seven Medicaid HealthChoice Managed Care Organizations (MCOs). The 2008 EDI reporting payers are listed at the end of this review and can also be found on the MHCC website at: http://mhcc.maryland.gov/edi/2008_Administrative_Transaction_Review-Reporting_Payers-0109.pdf.

Maryland EDI Activity Overview (%)

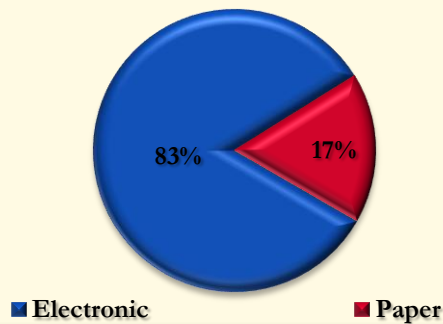
Provider Type	Government		Variance	Private		Variance	Total Payers		Variance
	2006	2007	Gain/(Loss)	2006	2007	Gain/(Loss)	2006	2007	Gain/(Loss)
Practitioner	87.6	89.3	1.7	74.1	77.0	2.9	80.0	82.3	2.3
Hospital	91.2	92.2	1.0	81.0	83.1	2.1	85.7	87.3	1.6
Subtotal	88.0	89.6	1.6	74.8	77.6	2.8	80.6	82.8	2.2
Dental	33.2	44.8	11.6	34.9	36.6	1.7	34.7	37.3	2.6
Total	87.3	88.9	1.6	72.3	75.4	3.1	78.5	80.8	2.3

Distribution of 2007 Transaction Shares

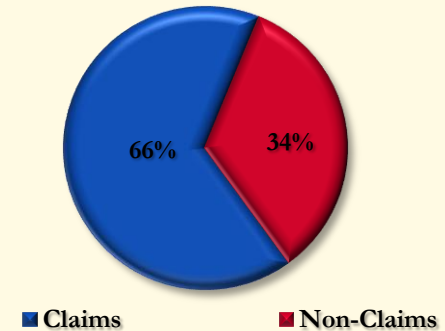
Electronic claim transactions accounted for more than four times the number of paper claims for all practitioner and hospital transactions. The shares of practitioner and hospital electronic claims nearly doubled the other non-claims transactions received by payers. This suggests that transactions used in the reimbursement process, such as the eligibility verification transaction, may be under utilized as these shares should be more closely aligned. The increased use of the eligibility transaction dramatically increases the probability that electronic claims will be paid correctly and that the claim will not be denied due to ineligibility. Approximately 24 percent of pended claims are related to coverage issues.⁵

In 2007, payer and provider shares of electronic claims were comparable with the figures reported in 2006. Practitioners outnumber hospitals in overall volume and submitted almost nine times the number of transactions as hospitals. The six large private payers continue to dominate claim shares among private and government payers, accounting for almost half of all electronic transactions.

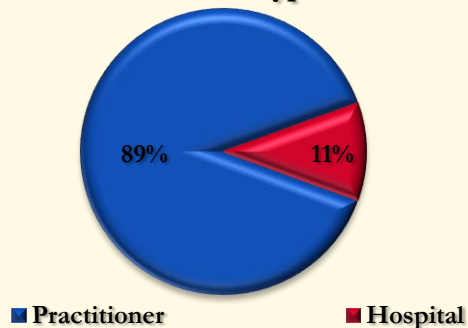
Electronic vs. Paper Transactions



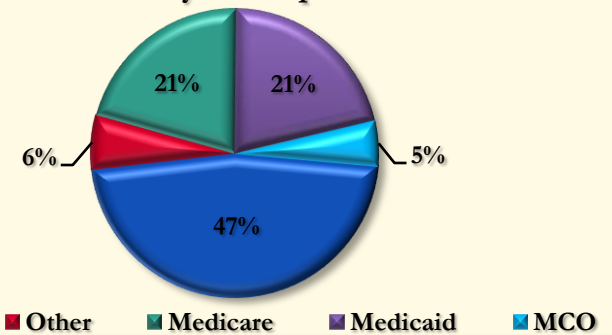
Claims vs. Non-Claims



Provider Types

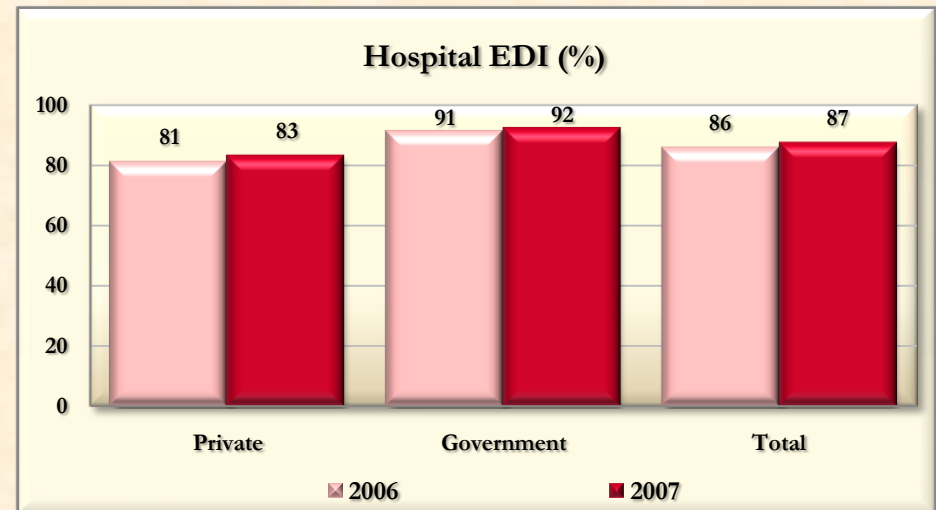
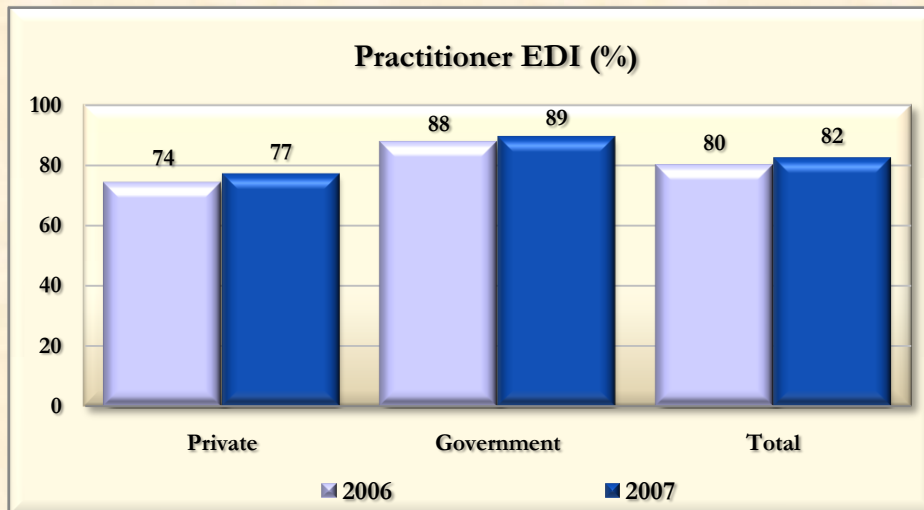
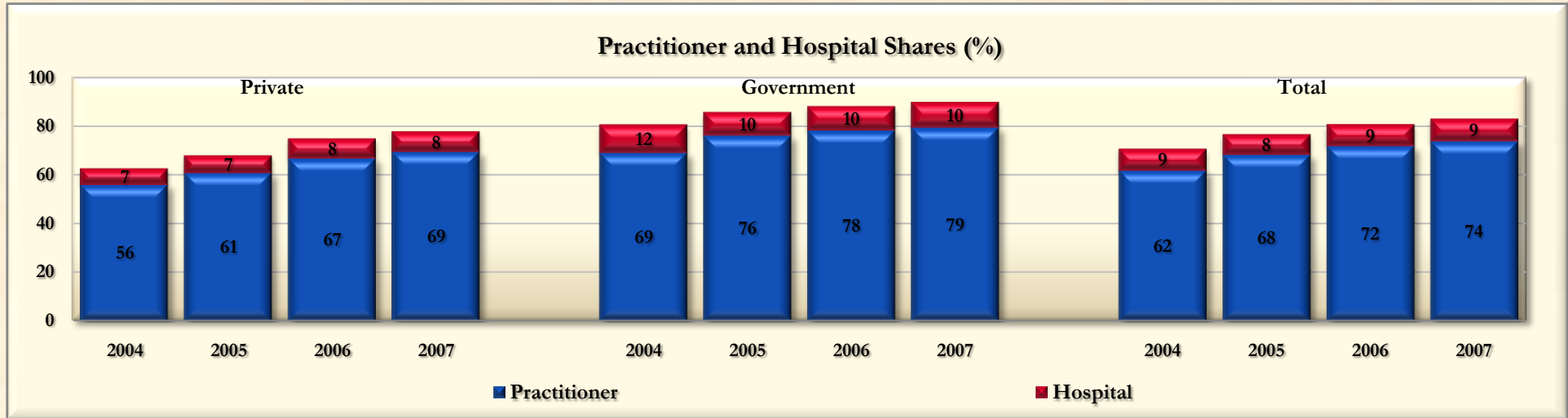


Payer Groups



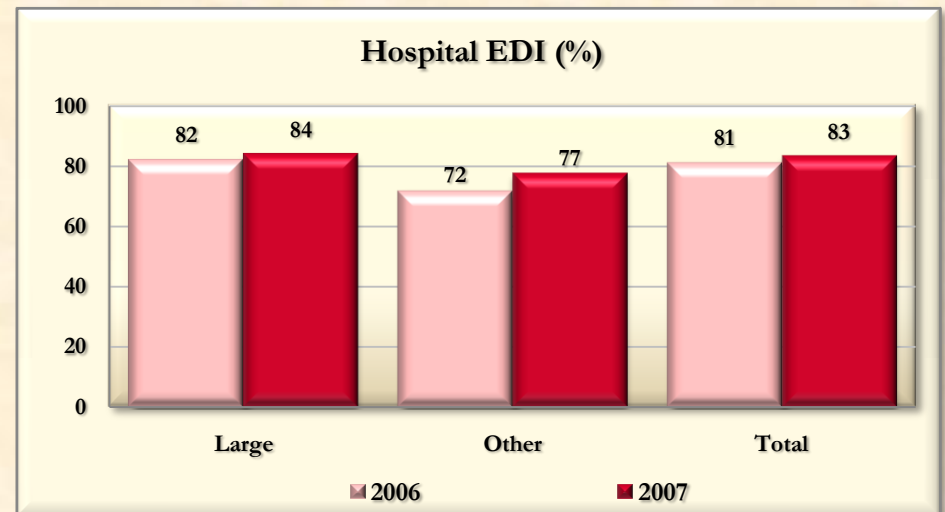
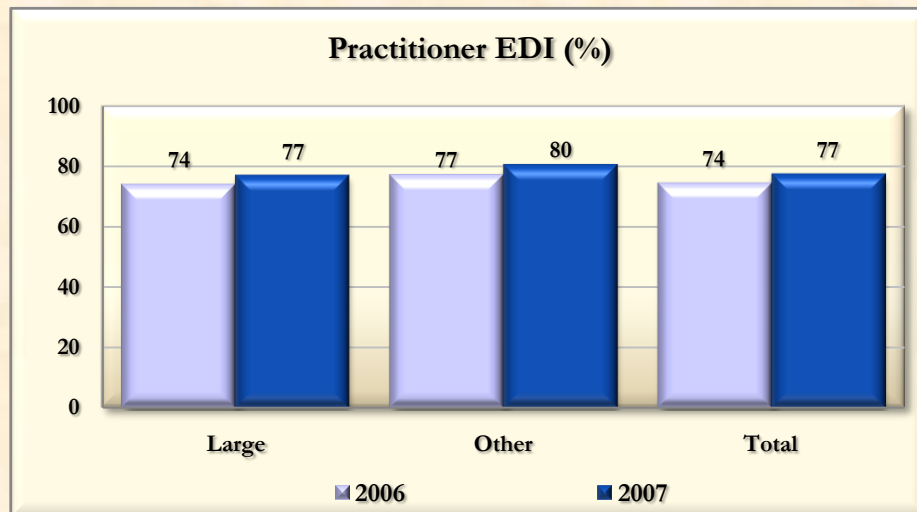
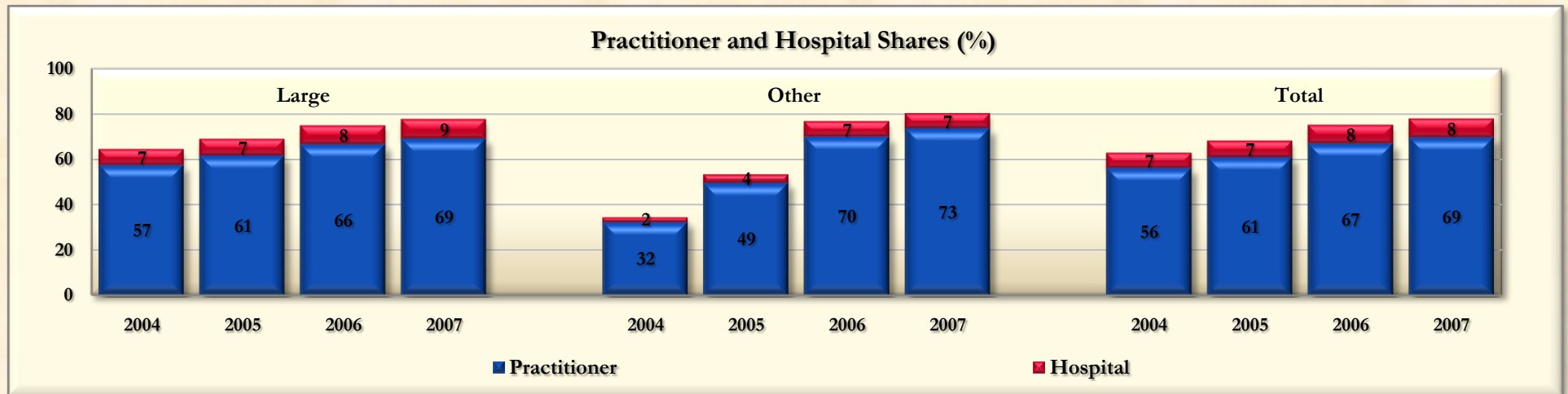
Private and Government Payer EDI

Private and government payer EDI has continued to increase since the October 2003 implementation of the HIPAA Transactions and Code Sets (TCS) standards. EDI for Medicare and Medicaid has continually outpaced private payers. Private payers frequently require that supporting documentation be submitted with the claim, which causes providers to submit the entire claim on paper to avoid reimbursement delays. These delays are associated with payers matching electronic claims with paper documentation. The continued increase in EDI is attributed to payer and provider efforts to maximize administrative efficiencies gained through the increased use of technology. Practitioners submit a larger volume of electronic claims that results in a significantly greater share as compared to hospitals. Hospitals, however, submit a higher percentage of claims electronically, and the total percentage of hospital EDI exceeded the total practitioner EDI by 5 points in 2007.



Private Payer EDI

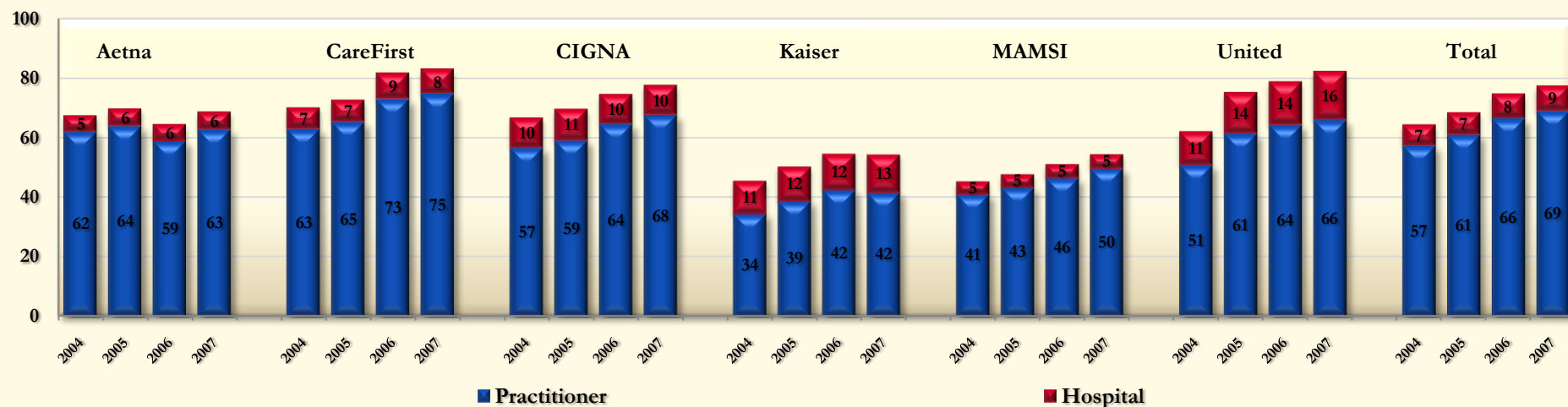
Approximately 39 private payers met the reporting requirements,⁶ of which there are six large private payers: Aetna, CareFirst, CIGNA, Kaiser, MAMSI, and UnitedHealthcare.⁷ The large payers account for 87 percent of all private payer transactions. The majority of large payers report continued modification of their technology to support electronic claims. The remaining 33 payers are referred to as “other” private payers. Until recently, these payers have trailed the large payers in adopting technology to support electronic claims and the other administrative transactions. The growth of EDI for other payers in the past couple of years, however, has exceeded large payers for the practitioner and hospital combined. Although large payers have a slight lead in hospital shares and other payers maintain the lead for practitioner shares, their overall EDI percentages are comparable. The increase by the other private payers in practitioner shares suggests these payers are continuing to make progress in expanding their EDI capabilities.



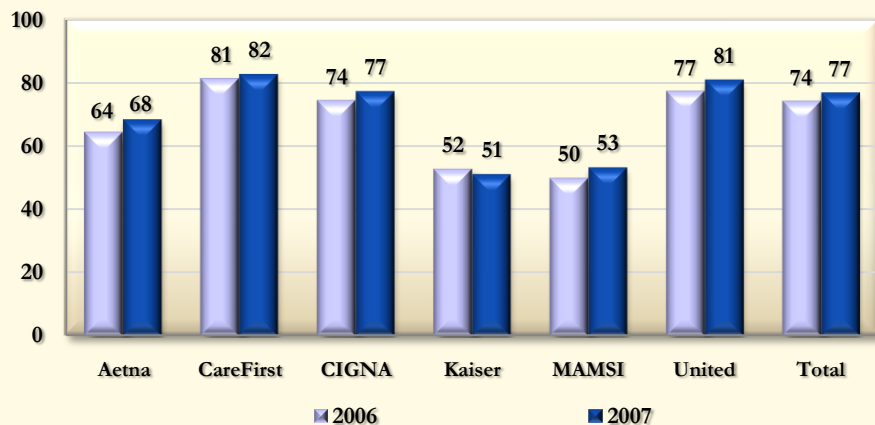
Large Private Payer EDI

The majority of large payers reported an increase in EDI share during this reporting period. Variations in EDI among the large payers range approximately 28 percentage points among payers. Two payers continued to report a particularly low rate of EDI when compared with the other large payers; both indicated the same overall EDI for 2007, but differing practitioner and hospital shares. CareFirst and UnitedHealthcare reported the largest share of electronic transactions for practitioners and hospitals, and the highest overall percentage of EDI. In recent years, these two payers have adopted EDI strategies to minimize paper attachments and have developed robust provider education programs aimed at increasing the volume of electronic claim transactions. Almost all payers reported an increase in EDI for both practitioners and hospitals.

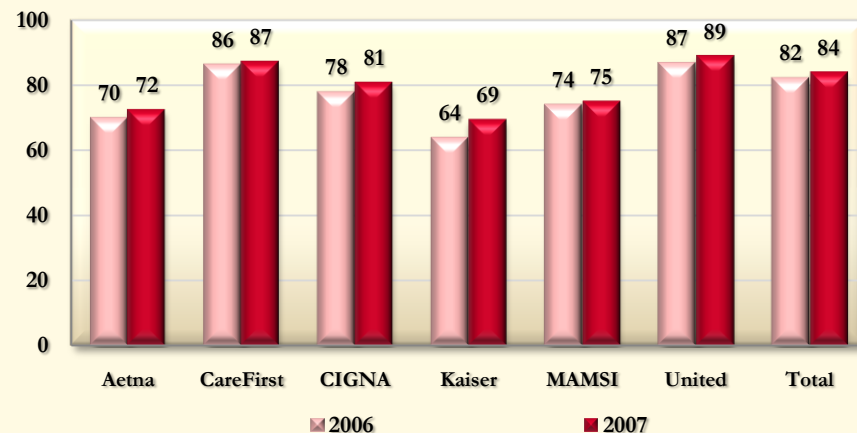
Practitioner and Hospital Shares (%)



Practitioner EDI (%)



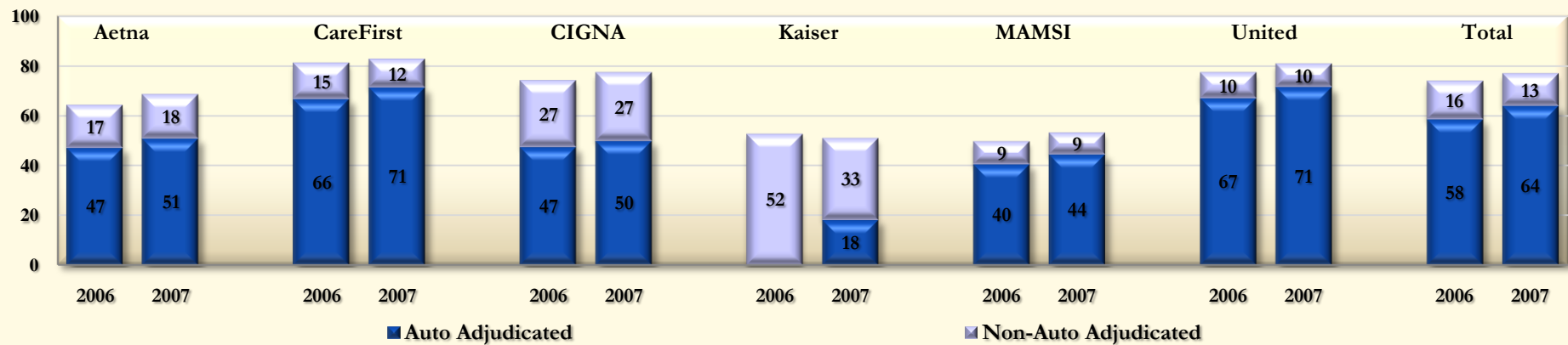
Hospital EDI (%)



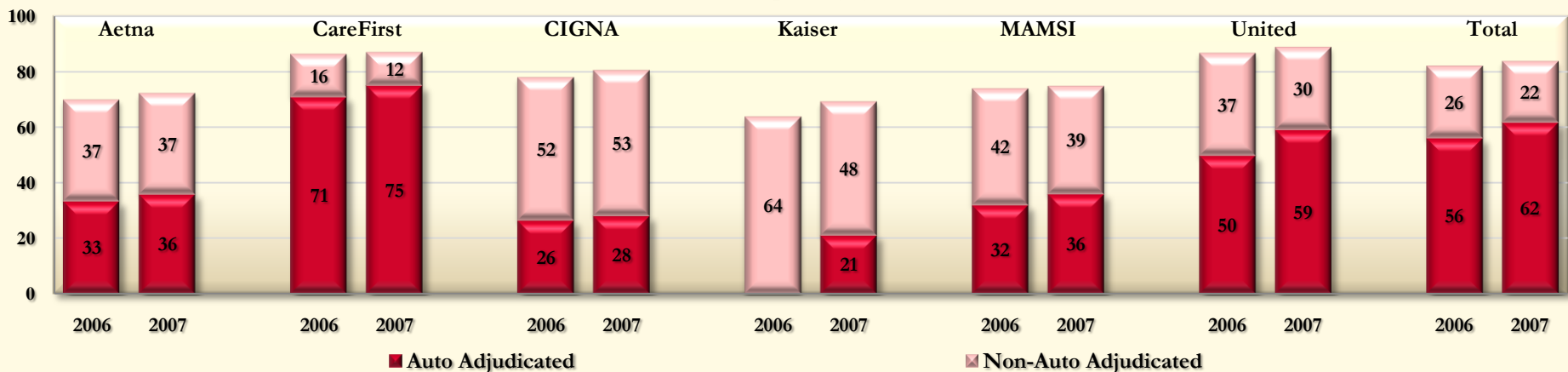
Auto Adjudication

Automation reduces operating costs and increases efficiencies because the number of days to process electronic claims decreases, rework efforts are minimized, and an expedient turnaround time increases provider satisfaction levels.⁸ Payer adjudication rules are a key factor in determining electronically processed claim transactions. The numerous variations in payer adjudication rules lead to confusion in the provider community around submitting electronic claims and this confusion leads to inefficiencies in claims processing and additional preventable administrative costs. Four of the six large payers reported auto adjudicating a higher rate of claims for practitioners as compared to hospitals. This is mostly attributed to more stringent system edits on hospital claims that require a claims examiner to review the claim before it is adjudicated. In 2006, the auto adjudication of electronic claims among private payers in Maryland surpassed the 71 percent national rate by 6 percentage points.⁹ This upward trend has continued with a 5 percent increase to 82 percent in 2007. The continued growth in Maryland is attributed to enhancements by payers to their adjudication systems that allow more claims to be processed electronically.

Practitioner (%)

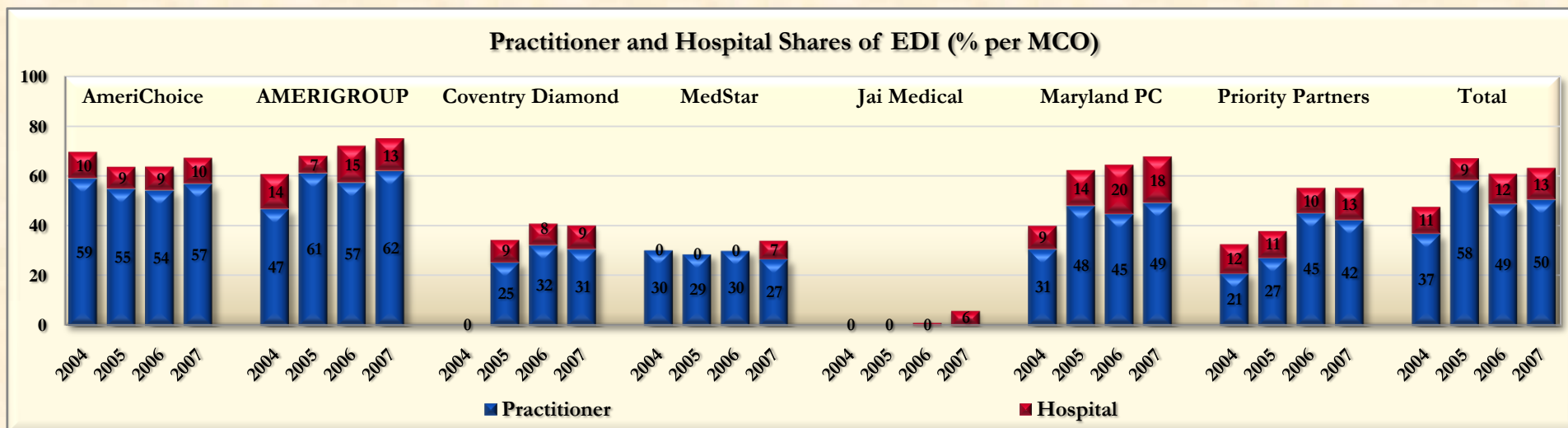
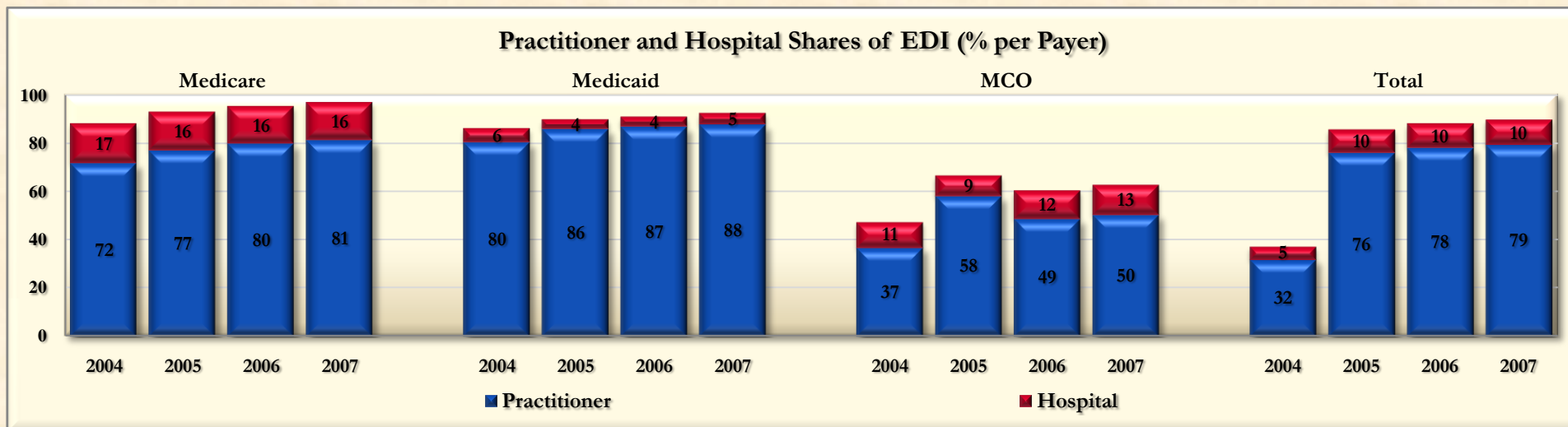


Hospital (%)



Government & MCO Payers

Over the last year, Medicare, Medicaid, and the MCOs reported only slight increases in their electronic practitioner and hospital claim shares. Medicare and Medicaid process almost all claims electronically, with their overall EDI at 97 and 93 percent, respectively. The government payers' limited benefit design plans make it less complicated for them to implement systems to support EDI. The implementation of the Administrative Simplification Compliance Act (ASCA) in 2003, requiring providers to submit health care transactions for payment electronically,¹⁰ has also contributed to Medicare's prominent share of electronic claim transactions. MCOs, on the other hand, trail government payers due to the slow implementation of technology to support electronic claim transactions. EDI for Coventry Healthcare Diamond Plan and Priority Partners remained the same, while the remaining MCOs reported an increase in EDI. Jai Medical Systems processed fewer claims electronically than the other MCOs, but reports a concerted effort to increase their share of EDI.



Other Administrative Electronic Health Care Transactions

The HIPAA TCS standards define data elements and formats for other administrative transactions, or non-claims. The electronic processing of these transactions can increase operating efficiencies for both payers and providers. Payers can support these transactions through a batch file or by using a portal on the payer's website. Web portals are appealing to practitioners because they typically allow the practitioner to verify individual patient information at the time care is rendered. Batch transactions allow a single, simultaneous file to be transmitted to payers for multiple patients, and are of greater interest to hospitals since they prefer to transmit a file that contains patient information prior to the day of admission. Although most payers support a combination of batch and web-based transactions, batch files drive compliance with the HIPAA TCS regulations.

Payers Supporting Other Administrative Transactions (%)					
Other Administrative Transaction Types	2003*	2004*	2005*	2006	2007
Health Plan Eligibility (270/271)	28	32	46	76	60
Health Claim Status (276/277)	19	24	38	67	62
Referral Certification & Authorization (278)	17	16	21	21	29
Health Plan Premium Payments (820)	0	3	8	14	7
Enrollment/Disenrollment in a Health Plan (834)	19	27	38	60	53
Claim Payment & Remittance Advice (835)	25	29	38	69	73

*MCO and Medicaid data not available for 2003-2005

Large Private Payers Supporting Web-Based vs. Batch Transactions												
W = Web-Based B = Batch												
Payer	Health Plan Eligibility (270/271)		Health Claim Status (276/277)		Referral Certification & Authorization (278)		Health Plan Premium Payments (820)		Enrollment/Disenrollment in a Health Plan (834)		Claim Payment & Remittance Advice (835)	
	W	B	W	B	W	B	W	B	W	B	W	B
Aetna	x		x		x						x	
CareFirst	x		x		x				x			x
CIGNA	x		x		x			x		x		x
Kaiser		x										x
MAMSI	x	x	x	x					x	x		x
United Healthcare		x		x						x		x

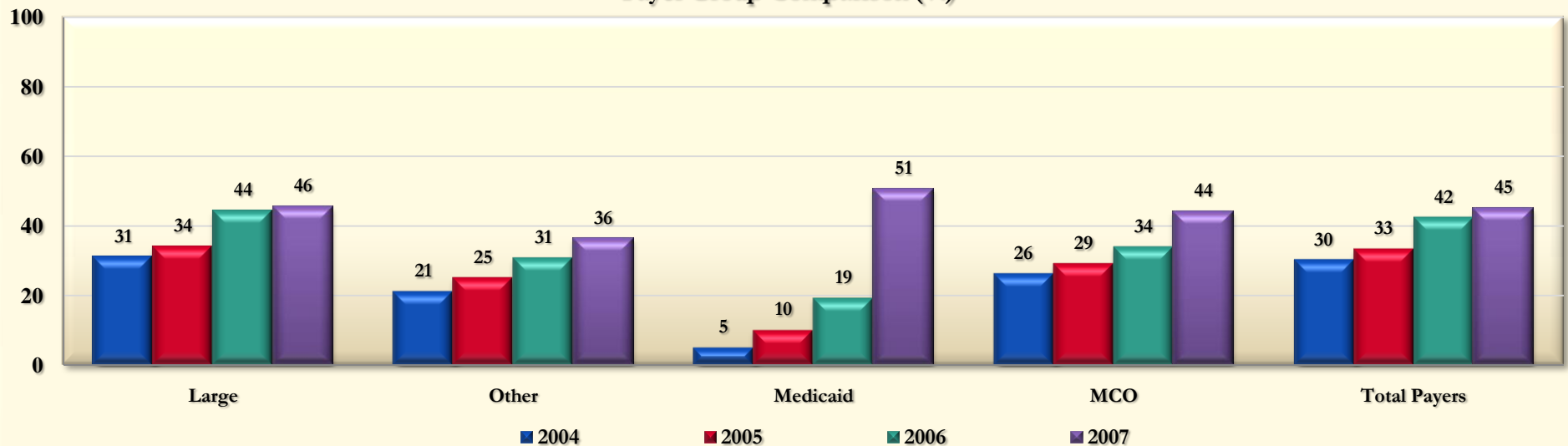
Dental EDI

A total of 44 payers submitted dental transaction data for 2007, which included 36 private payers,¹¹ Medicaid, and the Medicaid MCOs. Historically, the dental sector has trailed practitioners and hospitals in EDI adoption. This trend remained consistent in 2007 and is partially attributed to most payers viewing dental as a supplemental product to their medical coverage. As a result, the investment in dental EDI technology is not typically a priority. Most payers requesting support documents have different criteria in determining which claims require documentation.¹² Several national efforts have been underway with the goal to expand dental EDI.¹³ For example, the National Dental EDI Council (NDEDIC) promotes EDI through education, networking opportunities, and by tracking and reporting on EDI adoption.¹⁴ According to NDEDIC's 2008 Payer Survey, national dental payers reported a growth in EDI of approximately 4 percent.¹⁵ Although trailing national payers, Maryland dental payers achieved 10 percent growth in EDI over 2006. This growth is mainly attributed to the changes in the Medicaid system resulting in significant increases in dental EDI. These changes also affected the MCOs, which also reported a sizable increase.

Percentage EDI for Maryland and National Dental Payers

Payers	2003	2004	2005	2006	2007
Maryland	26	30	33	35	45
National	35	36	N/A ¹⁶	48	52

Payer Group Comparison (%)



MHCC Certified EHN Program

Electronic Health Networks (EHNs or networks) are entities involved in the exchange of electronic health care transactions between payers and providers. Pursuant to COMAR 10.25.07, *Certification of Electronic Health Networks and Medical Claims Clearinghouses*, an EHN that conducts business in Maryland is required to obtain MHCC EHN Certification. These networks must meet industry standards relating to privacy and confidentiality, security, technical performance, business practices, and physical and human resources.¹⁷ Currently, 37 networks are MHCC certified; the certification is valid for two years.¹⁸ Six of these EHNs achieved MHCC certification in 2008. A list of certified networks can be found on the MHCC website at: mhcc.maryland.gov/edi/ehn/index.html.

EDI in 2009

MHCC intends to continue working with payers to develop strategies aimed at boosting EDI adoption and to further expand market competition through increasing the number of networks certified to do business in the state. For the most part, EDI is expected to grow at a slow pace until more payers become fully compliant with the HIPAA-AS provisions. Resolving the adoption challenges associated with the administrative transactions is a necessary step to advancing health information exchange. EDI serves as the framework for sharing electronic patient information since many of the standards for administrative transactions are the foundation for clinical transactions. The findings from this year's review will help guide payers and providers in their efforts to develop strategies aimed at increasing EDI adoption.

About the Center for Health Information Technology

The Center for Health Information Technology is responsible for completing the review of payer EDI data and for certifying networks that do business in the state. It is primarily responsible for MHCC's health information technology initiatives. Electronic health information promises to bring vital clinical information to the point-of-care, helping to improve the safety and quality of health care while decreasing overall health care costs. Health information technology requires two crucial components to be effective – widespread use of electronic health records and electronic health information exchange. Leading activities for the Center for Health Information Technology include:

- Plan and implement a statewide health information exchange.
- Identify challenges to health information technology adoption and use, and formulate solutions and best practices for making health information technology work.
- Increase the availability and use of standards-based health information technology through consultative, educational, and outreach activities.
- Promote and facilitate the adoption and optimal use of health information technology for the purposes of improving the quality and safety of health care.
- Harmonize service area health information exchange efforts throughout the state.
- Certify electronic health networks that accept electronic health care transactions originating in Maryland.
- Develop programs to promote electronic data interchange between payers and providers.

2008 Administrative Transaction Review Reporting Payers

Private Payers		Government & MCO Payers
Aetna**	Guardian Life Insurance	Medicare
American Family Life Assurance*	Humana Dental Insurance*	Maryland Medicaid
American Republic Insurance Company	John Alden Insurance	MCOs
Ameritas Life Insurance*	Kaiser**	AmeriChoice
APS Healthcare	Lincoln Financial Group*	AMERIGROUP
CareFirst**	MAMSI**	Coventry Healthcare Diamond Plan
CIGNA**	Mega Life & Health Insurance	Helix Family Choice
Companion Life Insurance*	Metropolitan	Jai Medical Systems
Coventry Health Care	Mid-Atlantic Vision Services Plan	Maryland Physicians Care
Delta Dental Insurance*	New York Life Insurance	Priority Partners
DentaQuest Mid-Atlantic*	Principal Mutual Life Insurance	
Eastern Life & Health Insurance*	State Farm Mutual Automobile Insurance	
Elder Health	Time Insurance	
Fidelity Security Life Insurance	Unicare Life & Health Insurance	
First Health Life & Health Insurance	Unimerica Insurance*	
GE Group Life Assurance*	Union Labor Life Insurance	
Golden Rule Insurance	Union Security Insurance*	
Graphic Arts Benefits	United Concordia	
Great West	UnitedHealthcare**	
Group Dental Service of MD*		

*Dental-only payers**

*Large private payers***

ENDNOTES

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- ¹ International Federation of Library Associations and Institutions, “Electronic Data Interchange: An Overview of EDI Standards for Libraries (1993): *EDI Standards*,” <http://www.ifla.org/VI/5/reports/rep4/42.htm#chap2>, April, 1995.
- ² Beatty, G. “Introduction and Overview: Transition to Healthcare EDI,” <http://www.ehcca.com/presentations/ehc-info3/beatty1.pdf>, August, 2001, slides 18-21.
- ³ Center for Policy and Research, America’s Health Insurance Plans, “An Updated Survey of Health Care Claims Receipt and Processing Times,” <http://www.ahipresearch.org/pdfs/PromptPayFinalDraft.pdf>, May 2006, p. 5.
- ⁴ 45 CFR parts 160 and 162, August 17, 2000.
- ⁵ Center for Policy and Research, America’s Health Insurance Plans, “An Updated Survey of Health Care Claims Receipt and Processing Times,” <http://www.ahipresearch.org/pdfs/PromptPayFinalDraft.pdf>, May 2006, p. 4.
- ⁶ A listing of all payers can be found on page 12 of this report.
- ⁷ The listing of the six large private payers includes affiliated companies. MAMSI was acquired by UnitedHealth Group in February 2004, but MAMSI products continue to be offered and supported on MAMSI platforms.
- ⁸ Passport Health Plan, “Provider Services in Review,” <http://www.passporthealthplan.com/pdf/providercenter/providercom/yearinreview/2007.pdf>, 2008, p.3.
- ⁹ Center for Policy and Research, America’s Health Insurance Plans, “An Updated Survey of Health Care Claims Receipt and Processing Times,” <http://www.ahipresearch.org/pdfs/PromptPayFinalDraft.pdf>, May 2006, p. 4.
- ¹⁰ 42 CFR 424.32(d) (2). The regulation included provisions for exceptions in limited situations, which included small providers (those with fewer than 25 full-time equivalent employees), or claims from providers that submit an average of less than 10 claims per month.
- ¹¹ Ten dental payers represent the largest share of the Maryland market, including three regional payers providing benefits within the Baltimore-Washington area: CareFirst, Group Dental Service, and MAMSI; and seven national payers: Aetna, CIGNA, Delta Dental, Dental Benefit Providers, Guardian Life, MetLife, and United Concordia.
- ¹² Furlong, A., “ADA Studies Scanning: Paper Claim Filers May Benefit From Sending Scanned, Printed Radiographic Images”, ADA News, Nov. 19, 2008. <http://www.ada.org/prof/resources/pubs/adanews/adanewsarticle.asp?articleid=3319>.
- ¹³ The American Dental Association (ADA) is taking an active role in national HIE activities. The Standards Committee on Dental Informatics (ADA SCDI), the National Health Information Infrastructure (NHII) task force, the Electronic Health Record (EHR) workgroup, and the Systematized Nomenclature of Dentistry (SNODENT) were developed to help expand upon the processing of transactions electronically.
- ¹⁴ Information from the NDEDIC website, available at: www.ndedic.com.
- ¹⁵ Summary of 2008 Payers Survey, NDEDIC, 2008.
- ¹⁶ NDEDIC did not conduct the Annual Payer Survey in 2005.
- ¹⁷ Networks must be EHNAC accredited or re-accredited before certification or recertification recommendations are made to the Commission. <http://mhcc.maryland.gov/edi/ehn/overviewehn1207.pdf>.
- ¹⁸ Approaching the certification period expiration date, networks must reapply and be approved for recertification.



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*MHCC is an independent, regulatory commission
administratively located within the
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